STATEMENT OF WORK
(N47408-02-R-2309)

N47408-02-D-8305

LOW -RANGE DIFFERENTIAL PRESSURE (LRDP) LEAK DETECTION SYSTEM

1.0 SCOPE. This effort is to provide leak detection services that includes fabrication and installation of the Low Range Differential Pressure (LRDP) system for bulk fuel tanks (both UST and AST's), the HT-100 for pipeline leak detection, and perform pipeline leak detection and location services using the pipeline acoustic leak location system (PALS). The system must be capable of providing annual and monthly data from one test. Customers will include Navy Fuel Farms, Air Stations, FISC's, and Defense Energy Supply Center (DESC) Facilities. The effort also includes installing, maintaining, and expanding leak detection systems at various sites and locations for tanks and associated piping. This will be accomplished by individual delivery orders over a period of 5 years. All work shall be performed in accordance with the contract specifications and drawings included herein and additional specifications and drawings as required by delivery orders.

2.0 BACKGROUND. The Naval Facilities Engineering Service Center (NFESC), Port Hueneme, California, and its industrial partner, Vista Research, Inc., have designed, fabricated, installed, and evaluated the performance of the *Low-Range Differential Pressure (LRDP)* leak detection system at several Navy sites. The LRDP-24 is a fully automatic, computer controlled leak detection system. The LRDP system is comprised of (1) an innovative in-tank level sensing unit, (2) a remote test controller to collect and analyze the data from a test, and (3) a host computer to initiate, report, and archive the results of a test. A leak-detection test can be initiated by an operator at any time or can be scheduled to start at a future time with no operator present. Performance in an 88-ft-diameter, (650,000-gal UST's), a 122.5-ft-diameter, (2,100,000-gal UST) and a 12 million gallon cylindrical UST was determined. Results show that the contractor is capable of performing both bulk tank leak detection (monthly and annual ***testing*** as one system), can perform a test in 10 hours, and perform pipeline leak detection and location on complicated systems.

3.0 APPLICABLE DOCUMENTS. The following documents are listed to illustrate guidelines used at various sites when LRDP detection is being applied in the field. Not all documents are required however, more as reference when needed. Documents applicable to a specific delivery order will be listed therein.

a**.** *EPA 40 CFR Parts 280 and 281; and applicable State and local regulatory documents which may be more stringent than EPA*

b. EPA: *List of Leak Detection Evaluations for UST Systems, 9th Edition*

4.0 REQUIREMENTS.

4.1 GENERAL REQUIREMENTS

a. The contractor shall:

(1) Perform the work, which may include travel, described by the individual delivery order, per the Statement of Work (SOW).

(2) Provide facilities, equipment, in process documents, and personnel for in-process reviews at the contractors facility.

(3) Provide progress and funding reports of a nature and frequency as specified by individual delivery orders.

b. The Government shall:

(1) Identify and Provide Government Furnished Property (GFP) and/or Government Furnished information (GFI) as specified / required by individual delivery orders.

(2) Facilitate access to NFESC and other government facilities, personnel, documents and publications considered essential to the contractor's effort under subject to a need-to-know and security restrictions. Responsibilities of access and security, etc., remains with the contractor.

(3) Schedule and conduct in-process reviews either at the contractor's facilities or at the COTR's office as required by individual delivery order.

(4) Final inspection and acceptance of all work completed including any documentary material written or completed, will be performed at destination by the direction of Naval Facilities Engineering Command, Contracts office (NAVFACCO), NF23, Bldg. 41, NAVFACENGCOMDET-NFI, 3502 Goodspeed Street, Suite 2, Port Hueneme, CA 93043-4337, or his or her duty authorized representative unless otherwise indicated in the individual delivery order.

c. Schedule.
d. A delivery schedule shall be defined in each individual delivery order issued here under.

4.2 SPECIFIC REQUIREMENTS. The following describes typical tasks that may be required under separate delivery orders to the contract. The contractor shall provide installation, and testing of bulk underground storage tanks, above ground storage tanks, transfer lines and related fuel storage devices as well as training on all the above. The following types of tasks may be required:

4.3 REQUIREMENTS. The contractor shall provide installation of LRDP systems, and testing of bulk underground storage tanks, above ground storage tanks, transfer lines and related fuel storage devices. The following types of tasks may be required:

4.4 MOBILIZE AND DE-MOBILIZE The following describes the processes that may be required while mobilizing to the job site.

a. Mobilize test equipment and personnel to job site.

b. Set up sensors and related detection equipment

c. After tests are conducted de-mobilize equipment and personnel from job site.

4.4.1 MOBILIZE AND INSTALL LRDP SYSTEM BULK FUEL TANKS (service/non-permanent system). The following describes the processes that may be required while testing for leaks in bulk tanks.

a. Mobilize and install LRDP system on bulk tank and other utility-related control systems hardware and software.

b. Conduct leak detection test and associated bulk tank components

c. Perform data analysis from tests conducted.

d. Collate and disseminate data collected. Determine leak rate and provide written report

4.4.2 MOBILIZE AND INSTALL HT-100 SYSTEM for PIPELINES With capabilities of providing annual and monthly results from one test. The following describes the processes that may be required while testing for pipeline leaks. Permanent or temporary installation.

a. Mobilize and install LRDP system on pipelines and other utility-related control systems hardware and software.

b. Conduct leak detection test and associated piping (including leak location using the PALS).

c. Perform data analysis from tests conducted.

d. Collate and disseminate data collected. Determine leak location and recommend necessary repairs.

4.4.3 FABRICATE and INSTALL PERMANENT LRDP UNIT. The following describes typical tasks that may be required under separate delivery orders.

a. Fabricate permanent LRDP unit(s) designed to the length, size and shape of the bulk tank.

b. Ensure test capabilities with annual and monthly results per each test. Determine compatibility and interface requirements of proposed new equipment with existing equipment.

c. Provide/update system and component documentation, such as operation and maintenance manuals, as-built drawings, installation, engineering and product documentation, test and checkout procedures and other documentation specifically related to the LRDP.

d. Install using proper fittings connections and related assembly accessories to construct a permanent LRDP system.

4.4.4 TRAIN TO OPERATE LRDP SYSTEMS. The following describes typical tasks that may be required under separate delivery orders.

a. Provide instruction for use of the LRDP system operation.

b. Provide operation and maintenance training on-site and/or at the contractor's facility as required by the contract specification. Other specialized training related to the LRDP as defined in future delivery orders.

4.4.5 MAINTENANCE. The following describes typical tasks that may be required under separate delivery orders.

a. Provide maintenance service plans and schedules for all equipment provided under this contract.

b. Provide maintenance service for all equipment provided under this contract.

c. Develop, install and modify software relating to the LRDP and related control systems.

d. Troubleshoot and repair all equipment provided under this contract.

4.4.6 REPORTS. The following describes typical tasks that may be required under separate delivery orders Including work plans, health and safety and final reports.

a. The Contractor shall maintain/develop at the project site one set of full-size contract drawings and specifications marked to show any deviations which have been made from the Contract Task Order drawings or specifications including buried or concealed structures and utility features revealed during the course of site work. Record the horizontal and vertical location of buried utilities that differ from the contract drawings. The drawings shall be available for review by the Contracting Officer at all times. Upon completion of the work, deliver the marked set of prints to the Contracting Officer or designated representative.

b. The Contractor and his employees and subcontractors shall become familiar with and obey station regulations, including fire, traffic, and security regulations. Personnel employed on the station shall keep within the limits of the work (and avenues of ingress and egress), and shall not enter restricted areas unless required to do so and are cleared for such entry. The Contractor's equipment shall be conspicuously marked for identification. Project Information. The type of project information the Government will provide to the Contractor depends on the specific contract task order. The information may include contract drawings, maps and specifications, reports and reference drawings

c. Drawing Error and Omission. Omissions from drawings, specifications or insufficient descriptions of details of work which are manifestly necessary to carry out the intent of the drawings and specifications or, which are customarily performed, shall not relieve the Contractor from performing such omitted or insufficiently described details of the work but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.

d. Notification of Drawing Discrepancies. The Contractor shall check all furnished drawings and specifications immediately upon their receipt and shall promptly notify the Contracting Officer or designated representative of any discrepancies and a proposed

solution. Figures marked on drawings shall in general be followed in preference to scale measurements. Large scale drawings shall in general govern small scale drawings. The Contractor shall compare all drawings and verify the figures before laying out the work

e. Reference Drawings Accompanying Specification. Reference drawings may accompany Contract Task Order specifications and are intended only to show original construction. Drawings are the property of the Government and shall not be used for any purpose other than those contemplated by the specification. Reference drawings included with a Contract Task Order will typically be half size. Information on procuring any half-size drawing as a full-size drawing may be obtained from the Contracting Officer or designated representative Corporate Health and Safety Plan. After contract award, the Contractor will be tasked to submit a current Corporate Health and Safety Plan to the Contracting Officer for review by the Government for use as the contract Health and Safety Program Plan. Any additions or revisions required, resulting from this review shall be made by the Contractor.

4.4.7 Site Health and Safety Plan (SHSP). For each CTO involving field activities, prepare a written SHSP that complies with the respective Contract Task Order. As a minimum, the SHSP shall contain the following elements:

a. Site description and contaminant characteristics.

b. Health and safety hazard assessment for each site task and operation.

c. Name of the CIH and/or Site Health & Safety Specialist (SHSS).

d. Health and safety staff organization and responsibilities, including names and telephone number of each responsible person.

e. Site specific training; i.e., beyond the initial training.

f. Site specific medical surveillance parameters to include the drug testing policy and program.

g. Personnel protective equipment (PPE) to be used, limitations, inspection procedures, and establishment of action levels for upgrades and downgrades of PPE.

h. Maintain frequency and types of monitoring and sampling, plans, techniques, and instrumentation, including air (on-site and perimeter), heat and cold and stress, noise, and chain of custody for samples.

i. Health and safety work precautions and procedures; including MSDS, pre-entry briefings and subcontractor control.

j. Site control measures.

k. Personnel hygiene and decontamination facilities and procedures.

l. Equipment decontamination facilities and procedures.

m. On-site first aid and emergency procedures and equipment.

n. Emergency response plan and contingency procedures (on-site and off-site).

o. Logs, reports, and record keeping.

p. On-site work plans.

q. Communication procedures.

r. Spill containment procedures.

s. Confined space procedures

4.4.8 Acceptance of SHSP. Acceptance of the Contractor's SHSP is required prior to start of field activities on each contract task order. Acceptance is conditional and will be predicated on satisfactory performance during field activities. The Contracting Officer or designated representative shall implement no change in the approved plan without written concurrence. The Government reserves the right to require the Contractor to make changes in their SHSP and operations as necessary to ensure the health and safety of persons on or near the site.

a. All required technical information, reports, and data shall be delivered in accordance with Contract Data Requirements List (CDRL)

b. Perform special engineering services and studies relating to the installation, operation and maintenance of all equipment provided under this contract.

c. Provide electronic HP compatible copy with two hard copies of each report.

d. Provide cost proposals

5.0 PLACE OF PERFORMANCE FACILITIES. Work under this contract is to be performed at various locations and sites. The place of performance will be specified in individual delivery orders. Government equipment and facilities may be made available for performing portions of the anticipated work. When use of government facilities and/or equipment is required or permitted, their use will be specified in the attendant delivery order. The Contractor and his employees and subcontractors shall become familiar with and obey station regulations, including fire, traffic, and security regulations. Personnel employed on the station shall keep within the limits of the work (and avenues of ingress and egress), and shall not enter restricted areas unless required to do so and are cleared for such entry. The Contractor's equipment shall be conspicuously marked for identification.

a. Participate in on-site technical and/or regulatory meetings.

6.0 PERIOD OF PERFORMANCE. The period of performance will be specified in individual delivery orders. Period of performance shall not exceed final option year duration.

7.0 DELIVERY ORDERS. The contractor shall perform work as specifically authorized in individual delivery orders that will be issued by the Contracting Officer or a duly authorized Ordering Officer.

.